



SEQUENCE LISTING

<110> Liaw, Gin
Pedersen, Sven
Hendriksen, Sven

<120> A Method of Producing Saccharide Preparations

<130> 5318.200-US

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<170> PatentIn version 3.2

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<212> DNA

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aac	gaa	gcg	acc	gtg	gct	cgt	act	gcc	atc	ctg	aat	aac	atc	ggg	gcg	144
Asn	Glu	Ala	Thr	Val	Ala	Arg	Thr	Ala	Ile	Leu	Asn	Asn	Ile	Gly	Ala	
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gac	ggg	gct	tgg	gtg	tcg	ggc	gcg	gac	tct	ggc	att	gtc	gtt	gct	agt	192
Asp	Gly	Ala	Trp	Val	Ser	Gly	Ala	Asp	Ser	Gly	Ile	Val	Val	Ala	Ser	
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ccc	agc	acg	gat	aac	ccg	gac	tac	ttc	tac	acc	tgg	act	cgc	gac	tct	240
Pro	Ser	Thr	Asp	Asn	Pro	Asp	Tyr	Phe	Tyr	Thr	Trp	Thr	Arg	Asp	Ser	
				45					50					55		

ggg	ctc	gtc	ctc	aag	acc	ctc	gtc	gat	ctc	ttc	cga	aat	gga	gat	acc	288
Gly	Leu	Val	Leu	Lys	Thr	Leu	Val	Asp	Leu	Phe	Arg	Asn	Gly	Asp	Thr	
			60					65					70			

agt ctc ctc tcc acc att gag aac tac atc tcc gcc cag gca att gtc Ser Leu Leu Ser Thr Ile Glu Asn Tyr Ile Ser Ala Gln Ala Ile Val 75 80 85	336
cag ggt atc agt aac ccc tct ggt gat ctg tcc agc ggc gct ggt ctc Gln Gly Ile Ser Asn Pro Ser Gly Asp Leu Ser Ser Gly Ala Gly Leu 90 95 100	384
ggt gaa ccc aag ttc aat gtc gat gag act gcc tac act ggt tct tgg Gly Glu Pro Lys Phe Asn Val Asp Glu Thr Ala Tyr Thr Gly Ser Trp 105 110 115 120	432
gga cgg ccg cag cga gat ggt ccg gct ctg aga gca act gct atg atc Gly Arg Pro Gln Arg Asp Gly Pro Ala Leu Arg Ala Thr Ala Met Ile 125 130 135	480
ggc ttc ggg cag tgg ctg ctt gac aat ggc tac acc agc acc gca acg Gly Phe Gly Gln Trp Leu Leu Asp Asn Gly Tyr Thr Ser Thr Ala Thr 140 145 150	528
gac att gtt tgg ccc ctc gtt agg aac gac ctg tcg tat gtg gct caa Asp Ile Val Trp Pro Leu Val Arg Asn Asp Leu Ser Tyr Val Ala Gln 155 160 165	576
tac tgg aac cag aca gga tat gat ctc tgg gaa gaa gtc aat ggc tcg Tyr Trp Asn Gln Thr Gly Tyr Asp Leu Trp Glu Glu Val Asn Gly Ser 170 175 180	624
tct ttc ttt acg att gct gtg caa cac cgc gcc ctt gtc gaa ggt agt Ser Phe Phe Thr Ile Ala Val Gln His Arg Ala Leu Val Glu Gly Ser 185 190 195 200	672
gcc ttc gcg acg gcc gtc ggc tcg tcc tgc tcc tgg tgt gat tct cag Ala Phe Ala Thr Ala Val Gly Ser Ser Cys Ser Trp Cys Asp Ser Gln 205 210 215	720
gca ccc gaa att ctc tgc tac ctg cag tcc ttc tgg acc ggc agc ttc Ala Pro Glu Ile Leu Cys Tyr Leu Gln Ser Phe Trp Thr Gly Ser Phe 220 225 230	768
att ctg gcc aac ttc gat agc agc cgt tcc ggc aag gac gca aac acc Ile Leu Ala Asn Phe Asp Ser Ser Arg Ser Gly Lys Asp Ala Asn Thr 235 240 245	816
ctc ctg gga agc atc cac acc ttt gat cct gag gcc gca tgc gac gac Leu Leu Gly Ser Ile His Thr Phe Asp Pro Glu Ala Ala Cys Asp Asp 250 255 260	864
tcc acc ttc cag ccc tgc tcc ccg cgc gcg ctc gcc aac cac aag gag Ser Thr Phe Gln Pro Cys Ser Pro Arg Ala Leu Ala Asn His Lys Glu 265 270 275 280	912
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Asp Ser Glu Ala Val Ala Val Gly Arg Tyr Pro Glu Asp Thr Tyr Tyr	
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aac ggc aac ccg tgg ttc ctg tgc acc ttg gct gcc gca gag cag ttg	1056
Asn Gly Asn Pro Trp Phe Leu Cys Thr Leu Ala Ala Ala Glu Gln Leu	
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tac gat gct cta tac cag tgg gac aag cag ggg tcg ttg gag gtc aca	1104
Tyr Asp Ala Leu Tyr Gln Trp Asp Lys Gln Gly Ser Leu Glu Val Thr	
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Asp Val Ser Leu Asp Phe Phe Lys Ala Leu Tyr Ser Asp Ala Ala Thr	
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Gly Thr Tyr Ser Ser Ser Ser Ser Thr Tyr Ser Ser Ile Val Asp Ala	
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Val Lys Thr Phe Ala Asp Gly Phe Val Ser Ile Val Glu Thr His Ala	
380 385 390	
gca agc aac ggc tcc atg tcc gag caa tac gac aag tct gat ggc gag	1296
Ala Ser Asn Gly Ser Met Ser Glu Gln Tyr Asp Lys Ser Asp Gly Glu	
395 400 405	
cag ctt tcc gct cgc gac ctg acc tgg tct tat gct gct ctg ctg acc	1344
Gln Leu Ser Ala Arg Asp Leu Thr Trp Ser Tyr Ala Ala Leu Leu Thr	
410 415 420	
gcc aac aac cgt cgt aac tcc gtc gtg cct gct tct tgg ggc gag acc	1392
Ala Asn Asn Arg Arg Asn Ser Val Val Pro Ala Ser Trp Gly Glu Thr	
425 430 435 440	
tct gcc agc agc gtg ccc ggc acc tgt gcg gcc aca tct gcc att ggt	1440
Ser Ala Ser Ser Val Pro Gly Thr Cys Ala Ala Thr Ser Ala Ile Gly	
445 450 455	
acc tac agc agt gtg act gtc acc tcg tgg ccg agt atc gtg gct act	1488
Thr Tyr Ser Ser Val Thr Val Thr Ser Trp Pro Ser Ile Val Ala Thr	
460 465 470	
ggc ggc acc act acg acg gct acc ccc act gga tcc ggc agc gtg acc	1536
Gly Gly Thr Thr Thr Thr Ala Thr Pro Thr Gly Ser Gly Ser Val Thr	
475 480 485	
tcg acc agc aag acc acc gcg act gct agc aag acc agc acc acg acc	1584
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Gly	Leu	Val	Leu	Lys	Thr	Leu	Val	Asp	Leu	Phe	Arg	Asn	Gly	Asp	Thr	
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Gln	Gly	Ile	Ser	Asn	Pro	Ser	Gly	Asp	Leu	Ser	Ser	Gly	Ala	Gly	Leu	
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Gly	Glu	Pro	Lys	Phe	Asn	Val	Asp	Glu	Thr	Ala	Tyr	Thr	Gly	Ser	Trp	
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Gly	Arg	Pro	Gln	Arg	Asp	Gly	Pro	Ala	Leu	Arg	Ala	Thr	Ala	Met	Ile	
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Gly	Phe	Gly	Gln	Trp	Leu	Leu	Asp	Asn	Gly	Tyr	Thr	Ser	Thr	Ala	Thr	
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Asp	Ile	Val	Trp	Pro	Leu	Val	Arg	Asn	Asp	Leu	Ser	Tyr	Val	Ala	Gln	
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Tyr	Trp	Asn	Gln	Thr	Gly	Tyr	Asp	Leu	Trp	Glu	Glu	Val	Asn	Gly	Ser	
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Ser Phe Phe Thr Ile Ala Val Gln His Arg Ala Leu Val Glu Gly Ser
 185 190 195 200

Ala Phe Ala Thr Ala Val Gly Ser Ser Cys Ser Trp Cys Asp Ser Gln
 205 210 215

Ala Pro Glu Ile Leu Cys Tyr Leu Gln Ser Phe Trp Thr Gly Ser Phe
 220 225 230

Ile Leu Ala Asn Phe Asp Ser Ser Arg Ser Gly Lys Asp Ala Asn Thr
 235 240 245

Leu Leu Gly Ser Ile His Thr Phe Asp Pro Glu Ala Ala Cys Asp Asp
 250 255 260

Ser Thr Phe Gln Pro Cys Ser Pro Arg Ala Leu Ala Asn His Lys Glu
 265 270 275 280

Val Val Asp Ser Phe Arg Ser Ile Tyr Thr Leu Asn Asp Gly Leu Ser
 285 290 295

Asp Ser Glu Ala Val Ala Val Gly Arg Tyr Pro Glu Asp Thr Tyr Tyr
 300 305 310

Asn Gly Asn Pro Trp Phe Leu Cys Thr Leu Ala Ala Ala Glu Gln Leu
 315 320 325

Tyr Asp Ala Leu Tyr Gln Trp Asp Lys Gln Gly Ser Leu Glu Val Thr
 330 335 340

Asp Val Ser Leu Asp Phe Phe Lys Ala Leu Tyr Ser Asp Ala Ala Thr
 345 350 355 360

Gly Thr Tyr Ser Ser Ser Ser Ser Thr Tyr Ser Ser Ile Val Asp Ala
 365 370 375

Val Lys Thr Phe Ala Asp Gly Phe Val Ser Ile Val Glu Thr His Ala
 380 385 390

Ala Ser Asn Gly Ser Met Ser Glu Gln Tyr Asp Lys Ser Asp Gly Glu
 395 400 405

Gln Leu Ser Ala Arg Asp Leu Thr Trp Ser Tyr Ala Ala Leu Leu Thr
 410 415 420

Ala Asn Asn Arg Arg Asn Ser Val Val Pro Ala Ser Trp Gly Glu Thr
 425 430 435 440

Ser Ala Ser Ser Val Pro Gly Thr Cys Ala Ala Thr Ser Ala Ile Gly
 445 450 455

Thr Tyr Ser Ser Val Thr Val Thr Ser Trp Pro Ser Ile Val Ala Thr
 460 465 470

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Arg Ser Gly Met Ser Leu
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